

43. At 718/ 073
MDDC - 1073

MDDC-1073

MDDC - 1073

UNITED STATES
ATOMIC ENERGY COMMISSION
OAK RIDGE
TENNESSEE

THERMAL NEUTRON FLUX IN THE ARGONNE HEAVY-WATER PILE

by

W. H. Zinn

Argonne National Laboratory

NO
LIBRARY

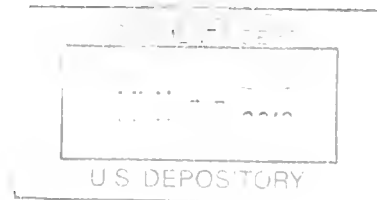
Published for use within the Atomic Energy Commission. Inquiries for additional copies and any questions regarding reproduction by recipients of this document may be referred to the Documents Distribution Subsection, Publication Section, Technical Information Branch, Atomic Energy Commission, P. O. Box E, Oak Ridge, Tennessee.

Inasmuch as a declassified document may differ materially from the original classified document by reason of deletions necessary to accomplish declassification, this copy does not constitute authority for declassification of classified copies of a similar document which may bear the same title and authors.

Date of Manuscript: March 28, 1947

Document Declassified: June 24, 1947

This document consists of 1 page.



Digitized by the Internet Archive
in 2011 with funding from

University of Florida, George A. Smathers Libraries with support from LYRASIS and the Sloan Foundation

THERMAL NEUTRON FLUX IN THE ARGONNE HEAVY-WATER PILE

By W. H. Zinn

This pile is normally operated at a power in the neighborhood of 300 KW. For experimental reasons there sometimes are very considerable departures from this value.

Irradiation of chemicals and materials is usually carried out either in a thimble centrally located in the pile, or a region in the reflector of the pile near the peripheral boundary.

The thermal neutron flux in the central thimble is definitely dependent upon what materials are in the thimble. As a general rule, however, this flux is approximately 10^{12} neutrons/cm²/second.

UNIVERSITY OF FLORIDA



3 1262 08909 7868